CLAIMS

A method of managing security keys generated from an ancestral hierarchy and used to provide selective access to provision of a service, wherein invalidation of a
key necessitates reconfiguration of each other key within the hierarchy to the extent another key and an invalidated key share common ancestry, the method comprising the steps of:

defining at least two groups of users of the service to whom keys have been issued;

allocating within the hierarchy a distinct domain for each group of users; and issuing keys to users from domains within the hierarchy upon the basis of their grouping.

- 2. A method according to claim 1 wherein the at least two groups of users are defined upon the basis of a predetermined policy which provides that users are grouped according to their perceived value to a provider of the service.
- 3. A method according to claim 2 wherein a first user group having the highest perceived value to the provider are allocated keys from a first domain, and wherein keys from the first domain share fewer ancestors with keys from other domains than said keys from other domains share with each other.
 - 4. A method according to claim 3 wherein keys from the first domain share only one ancestor with said keys from other domains.

25

15

20

- 5. A method according to claim 1 wherein the ancestral hierarchy has a binary tree architecture.
- 6. A method according to claim 1 wherein the at least two groups of users are defined upon the basis of a predetermined policy which provides that users are grouped according to a perceived susceptibility of them ceasing to require the service, and a first user group having the highest perceived susceptibility are allocated keys from a first domain, and wherein keys from the first domain share fewer ancestors

with keys from other domains than said keys from other domains share with each other.

- 7. A method according to claim 6 wherein keys from the first domain share only5 one ancestor with said keys from other domains.
 - 8. A method according to claim 1 wherein varying levels of service are available and a group of users of a low-service level are allocated placebo keys providing no security, thereby to obviate a need to reconfigure other user's keys upon their invalidation.
 - 9. A method according to claim 8 wherein the service is a dynamic service and its value is ephemeral and based upon its contemporaneous nature.
- 15 10. A method of managing security key distribution to a plurality of users of a service comprising the steps of:

defining levels of service provision;

10

allocating keys to users which are indicative to a service provider of the level of service to which they are entitled; and

- for at least one level of service provision, allocating placebo keys which do not provide security for the provision of the service.
- 11. A method according to claim 10 wherein the placebo keys operate in such a manner that a user is not able to perceive a difference between a functioning security25 key and a placebo key.
 - 12. A method according to claim 10 wherein the service is dynamic and its value is ephemeral and based upon its contemporaneous nature.
- 30 13. A computing entity adapted to manage distribution of security keys keys generated from an ancestral hierarchy and used to provide selective access to provision of a service, wherein invalidation of a key necessitates reconfiguration of each other key within the hierarchy to the extent another key and an invalidated key share common ancestry, the entity being adapted to:

define at least two groups of users of the service to whom keys have been issued; allocate within the hierarchy a distinct domain for each group of users; and issue keys to users from domains within the hierarchy upon the basis of their grouping.

5

14. A computing entity adapted to manage security key distribution to a plurality of users of a service by:

defining levels of service provision;

allocating keys to users which are indicative to a service provider of the level of service to which they are entitled; and

for at least one level of service provision, allocating placebo keys which do not provide security for the provision of the service.

15

10